

JOHN D. UNSWORTH, LL.B.

as Shape Memory Alloy (SMA) or other materials exhibiting shape recovery properties, that unload in the opposite direction.

Thus, the said first sentence of the second paragraph on page 7 of the disclosure should have read:

Other preferred embodiments incorporate both conventional springy materials, for example, steel, plastic or superlastic material which would be loaded up by rolling-up ³ the roll ⁴ formed in the tubular elements ¹; in combination with unconventional springy materials such as Shape Memory Alloy (SMA) or other materials exhibiting shape recovery properties, that unload in the opposite direction.

With respect to the Examiner's second objection to the character "8" being used to designate both the "foot" and the "sock", I have changed the character "8" to the character **1a** in the following 3 paragraphs that wrongly referring to the sock as "8" rather than **1a**.

a) Line 12 Page 8 on original, and line 14 on the following excerpt:

material while the sock is unrolling to its fully extended wearable form. However when the SMA or similar material is heated, it would recover its coiled or rolled-up, memorized shape, which could be set strong enough to overcome the oppositely acting conventional springy element. The springy element made of the SMA or other similar material would then cause the sock to roll-up and off the wearer's foot. The rolled-up sock can then be temporarily constrained, by means described below, to maintain its torus like shape, even after the SMA returns, by cooling, to its floppy martensitic form, at which point the conventional springy material prevails, acting to otherwise un-roll the sock in the opposite direction, but for the temporarily imposed constraint. As mentioned the heating of the SMA or other similar material, could be effected by a number of different means, including a warm water bath or electrical resistive heating. This resistive heating can be effected by a battery and controller **2b** attached to the sock (**8**) **1a**, with power delivered to the springy elements **2a** by conductors **2c**, all as illustrated in Fig. 6. The

7 Innovation Drive, Dundas, Ont. L9H 7H9, Suite 107

Fax: (905) 689-2200

unsworth@cogetco.net

Tel: (905) 690-6627

2.

JOHN D. UNSWORTH LL.B.

power supplied by it to the SMA material can be turned on and off by a switch 2d actuated by the wearers other foot or by pressing it against another object or by remote control means or other means well known to the art. This arrangement might of course be reversed so that the ~~convention~~ conventional springy material would act to roll out the socks and the SMA or other similar material would act in the opposite direction to roll-back the socks.

The said paragraph should have read:

material while the sock is unrolling to its fully extended wearable form. However when the SMA or similar material is heated, it would recover its coiled or rolled-up, memorized shape, which could be set strong enough to overcome the oppositely acting conventional springy element. The springy element made of the SMA or other similar material would then cause the sock to roll-up and off the wearer's foot. The rolled-up sock can then be temporarily constrained, by means described bellow, to maintain its torus like shape, even after the SMA returns, by cooling, to its floppy martensitic form, at which point the conventional springy material prevails, acting to otherwise un-roll the sock in the opposite direction, but for the temporarily imposed constraint. As mentioned the heating of the SMA or other similar material, could be effected by a number of different means, including a warm water bath or electrical resistive heating. This resistive heating can be effected by a battery and controller 2b attached to the sock 1a, with power delivered to the springy elements 2a by conductors 2c, all as illustrated in Fig. 6. The power supplied by it to the SMA material can be turned on and off by a switch 2d actuated by the wearer's other foot or by pressing it against another object or by remote control means or other means well known to the art. This arrangement might of course be reversed so that the conventional springy material would act to roll out the socks and the SMA or other similar material would act in the opposite direction to roll-back the socks.

7 Innovation Drive, Dundas, Ont. L9H 7H9, Suite 107

Fax: (905) 689-2200

unsworth@cogeco.net

Tel: (905) 690-6627

3.

JOHN D. UNSWORTH, LL.B.

b) Line 12 Page 12 on the original, line 12 on the following excerpt:

Fig. 1 illustrates two springy elements 2 connected to a tubular element 1 having a closed distal end and an open proximal end. Preferred embodiments of this invention also can have open distal ends and distal ends that can be opened and closed, which are often used in medical settings where access to the toes is required. Other example of open ended tubular elements 1 would be pant legs and shirt sleeves that are attached at their distal ends to the trunk of the pants and the trunk of shirts or coats. Another example of variations of tubular elements 1 is the sleeve and/or cuff of gloves 11, Fig. 12. However, most preferred embodiments have closed distal ends, and some such as condoms, require it. The tubular element 1 is illustrated as a straight tube, but it is to be understood that the tubular element can be any shape and come within the ambit of this invention. Socks ((8,)) 1a for example can be curved to accommodate the wearer's heel, or be straight as in heel-less socks. Both come within the ambit of this invention.

The said paragraph should have read:

Fig. 1 illustrates two springy elements 2 connected to a tubular element 1 having a closed distal end and an open proximal end. Preferred embodiments of this invention also can have open distal ends and distal ends that can be opened and closed, which are often used in medical settings where access to the toes is required. Other example of open ended tubular elements 1 would be pant legs and shirt sleeves that are attached at their distal ends to the trunk of the pants and the trunk of shirts or coats. Another example of variations of tubular elements 1 is the sleeve and/or cuff of gloves 11, Fig. 12. However, most preferred embodiments have closed distal ends, and some such as condoms, require it. The tubular element 1 is illustrated as a straight tube, but it is to be understood that the tubular element can be any shape and come

7 Innovation Drive, Dundas, Ont. L9H 7H9, Suite 107

Fax: (905) 689-2200

unsworth@cogeco.net

Tel: (905) 690-6627

4.

JOHN D. UNSWORTH, LLC

within the ambit of this invention. Socks 1a for example can be curved to accommodate the wearer's heel, or be straight as in heel-less socks. Both come within the ambit of this invention.

c) Line 12 Page 15 on the original, and line 8 of the following excerpt:

Fig. 7 illustrates possible locations of the restraining patches 5a and 5b and the skid patch 6, although, as mentioned the location, size, shape and number of these will vary for each preferred embodiment, depending upon factors such as material type and use to which the device is put. In the case of a condom, a skid patch 6 would in most cases be unnecessary and the restraint 5a and 5b would in some preferred embodiments take the form of detachable adhesive. Fig. 7 also illustrates a loop 9 attached to top or cuff of the sock ((8.)) 1a. This is included in some preferred embodiments to assist in the removal of the sock. This can be quite large to allow a toe from the other foot to pass within the loop 9 to push the sock off. While a loop is illustrated, other preferred embodiments have hooks and other means to assist in removing the socks.

The said paragraph should have read:

Fig. 7 illustrates possible locations of the restraining patches 5a and 5b and the skid patch 6, although, as mentioned the location, size, shape and number of these will vary for each preferred embodiment, depending upon factors such as material type and use to which the device is put. In the case of a condom, a skid patch 6 would in most cases be unnecessary and the restraint 5a and 5b would in some preferred embodiments take the form of detachable adhesive. Fig. 7 also illustrates a loop 9 attached to top or cuff of the sock 1a. This is included in some preferred embodiments to assist in the removal of the sock. This can be quite large to allow a toe from the other foot to pass within

7 Innovation Drive, Dundas, Ont. L9H 7H9, Suite 107

Fax: (905) 689-2200

unsworth@cogeco.net

Tel.: (905) 690-6627

JOHN D. UNSWORTH, LL.B.

the loop 9 to push the sock off. While a loop is illustrated, other preferred embodiments have hooks and other means to assist in removing the socks.

d) I have amended the drawing Fig. 5, 7 and 10 to position character "8" to designate the "foot" rather than the ankle.

e) I have amended the drawing Fig. 10 to position character "10" to point to the "bracelet type ring"

I enclose a new page 3 of the drawings that includes fig. 10, marked "replacement sheet".

CLAIMS

1. I request that Claim 1 be cancelled and replaced with the following claim:

1. A device comprised of a flexible tubular element 1, 1a to which is laminated, incorporated or intertwined, one or more springy elements, by connecting means such as adhesive, weaving, knitting or stitching, and

the springy element(s) are made of springy types of metal, plastic, superlastic nickel-titanium, other materials that exhibit sufficient springy qualities, or Shape Memory Alloys (SMA) or other material that exhibits shape recovery, or compositions thereof, and

said springy element(s) are loaded or further loaded, if preloaded, by being rolled-up with the tubular element to which they are attached, connected or incorporated, from the proximal end of the tubular element, in the direction of the distal end, to form an approximate torus shape, and in the case of Shape Memory Allow (SMA) or other material that exhibits shape recovery, the springy element(s) are rolled-up in their martensitic phase, or in the case of other materials that exhibit shape recovery, an analogous phase, and

restraining means, which may be composed of detachable attachments on the adjoining surfaces or extensions of the adjoining surfaces of the rolled tubular element, preferably

7 Innovation Drive, Dundas, Ont. L9H 7H9, Suite 107

Fax: (905) 689-2200

unsworth@cogeco.net

Tel: (905) 690-6627

6.